



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 6

1445 ROSS AVENUE, SUITE 1200

DALLAS, TEXAS 75202 – 2733

November 29, 2018

Ms. Denise Sloan
Policy Analysis Branch
Regulatory Division, CESWG-RDP
U.S. Army Corps of Engineers
P.O. Box 1229
Galveston, Texas 77553-1229

Dear Ms. Sloan:

The U.S. Environmental Protection Agency (EPA) Region 6 has reviewed Public Notice (PN) SWG-2015-00175, dated November 1, 2018. The applicant, Texas LNG Brownsville, LLC (Texas LNG), proposes to construct, install, operate, and maintain structures and equipment necessary for the liquefaction and export of natural gas, including the construction of a gas supply pipeline with compressor stations and attendant features, and a liquified natural gas (LNG) terminal with marine facilities. As proposed, the LNG terminal would impact approximately 40.3 acres of tidal mudflats and 0.2 acres of palustrine emergent (PEM) wetlands. Per the applicant, the proposed pipeline installation would result in the temporary fill of approximately 56.3 acres of wetlands or other waters. The proposed LNG terminal and gas supply pipeline project site are located along State Highway 48 (SH48) and the proposed LNG terminal is on the north side of the Brownsville Ship Channel (BSC), approximately 19 miles northeast of the City of Brownsville, in Cameron County, Texas.

The following comments are being provided for use in reaching a decision relative to compliance with the EPA's 404(b)(1) *Guidelines for the Specification of Disposal Sites for Dredged or Fill Material* (Guidelines) (40 CFR Part 230):

Upon review of the current proposal, the EPA has concerns whether the information provided by the applicant on the proposed project will sufficiently enable the U.S. Corps of Engineers Galveston District (Corps) to make a legally defensible permit decision in regard to compliance with the Guidelines. Under the Guidelines, no discharge of dredged or fill material may be permitted by the Corps if: (1) a practicable alternative exists that is less damaging to the aquatic environment so long as that alternative does not have other significant adverse environmental consequences, or (2) the nation's waters would be significantly degraded. Under the Guidelines, a project must incorporate all appropriate and practicable measures to first avoid impacts to wetlands, streams, and other aquatic resources and then minimize unavoidable impacts. After avoidance and minimization measures have been applied, the project must include appropriate and practicable compensatory mitigation for the remaining unavoidable impacts. The Guidelines also require evaluation of all direct, secondary and cumulative impacts reasonably associated with the proposed discharge including effects on wildlife habitat, aquatic ecosystem diversity, stability and productivity, recreation, aesthetics, and economic values.

The discussion on avoidance and minimization in the PN indicates the applicant has addressed environmental impacts by considering designs to avoid waters of the U.S., such as restricting fill to small perimeter areas, adjusting the layout of the terminal facility components, routing roads and transmission lines around wetlands, and collocating portions of the pipeline near right-of-ways (ROWs). The Conceptual Mitigation Plan also includes a short section on avoidance and minimization measures and references a detailed discussion of avoidance and minimization that was provided to the Corps in the permit application supplemental narrative. As detailed information regarding alternatives analysis and avoidance and minimization measures was not provided in the PN, the EPA suggests that in addition to specific alternatives evaluated, the applicant should additionally consider combinations of alternatives that may be available. If it has not yet done so, we recommend that the applicant provide information to assist the Corps in making its factual determinations and to help ensure the spirit of the Guidelines are met.

As provided in the PN, the information provided by the applicant does not appear to adequately reflect the consideration of direct, secondary, and cumulative impacts to the various functions and values provided by the impacted aquatic resources. The wetland habitats adjacent to the BSC are a relatively unique ecosystem to the lower Texas coast and provide a number of important ecosystem services, including water quality benefits, flood storage, and fisheries and wildlife habitat including potential habitat for threatened and endangered species. Specifically, it is unclear if possible environmental losses related to physical substrate, water circulation, fluctuation and salinity, suspended particulates/turbidity, contaminants, aquatic ecosystems and organisms have been evaluated. As the proposed construction and permanent facility location are in very close proximity to avoided wetlands, and in some cases within the fenced facility perimeter, the EPA suggests additional information about potential secondary impacts be included. If it has not yet done so, we recommend that the applicant provide information to assist the Corps in making its factual determinations and to help ensure the spirit of the Guidelines are met.

Regarding the Conceptual Mitigation Plan provided in the PN, the applicant proposes to mitigate for the 40.5 acres of mudflats and PEM wetlands impacted at the terminal site by preserving 405 acres at the La Loma Ecological Preserve. The Preserve is owned by the Brownsville Navigation District (BND) and is leased to the U.S. Fish and Wildlife Service until 2023. The proposed mitigation site is mapped as Designated Critical Habitat for piping plover, and Essential Fish Habitat. The applicant proposes to execute a conservation easement with an independent land management entity, but the land would be owned by the BND. For the 56.3 acres of wetlands or other waters impacted by the construction of the gas supply pipeline, the applicant proposes no compensatory mitigation as they have stated no permanent fill of wetlands or waterbodies is expected. Preconstruction contours would be restored following installation of the pipeline, and herbaceous vegetation and small shrubs would be allowed to re-establish within the ROW.

The EPA is concerned that Texas LNG is proposing to meet its compensatory mitigation requirements for unavoidable impacts to aquatic habitats through preservation. The 2008 Final Mitigation Rule assigns a low priority to compensatory mitigation for impacts using preservation and includes a number of criteria, that must all be met, for proposals that use preservation to meet compensatory mitigation requirements. Two of those criteria included a demonstration that the resources are under threat of destruction or adverse modifications, and that the preserved site will be permanently protected through an appropriate real estate or other legal instrument (e.g., easement, title transfer to state resource agency or land trust). The EPA recommends that Texas LNG undertake an exhaustive evaluation of potential mitigation opportunities based on restoration or enhancement prior to limiting mitigation to preservation

as the methodology of choice. This evaluation may be a combination of approaches and may consider including out-of-kind or out-of-watershed projects that may be more ecologically desirable than preservation only.

If Texas LNG continues to pursue preservation to meet its compensatory mitigation requirements, the EPA recommends the applicant provide robust support for the proposed preservation approach focusing on the requirements of the 2008 Mitigation Rule. Specifically, the applicant would need to satisfy the threat of destruction or adverse modification criteria and address appropriate higher compensation ratios. Additionally, it is unclear whether the proposed Memorandum of Understanding with BND and associated conservation easement approach identified in the Conceptual Mitigation Plan will meet the requirement to protect the preserved site in perpetuity from development or any activity contrary to its use as a wetland compensatory mitigation area. The EPA typically recommends that a third-party conservation easement holder, such as a qualified land trust accredited by the Land Trust Alliance, be utilized and recommends the conservation easement holder be identified prior to approval of the mitigation plan and permit issuance.

Furthermore, to ensure the proposed mitigation area is successfully managed and protected in perpetuity, the EPA recommends the applicant develop a detailed average annualized long-term management costs (i.e., signage, monitoring, trash removal, vandalism) and demonstrate that the amount of the proposed long-term funding endowment will be adequate to maintain and manage the on-site aquatic resources and the site protection in perpetuity, considering inflation and any investment fees. If it has not yet done so, we recommend the applicant submit documentation supporting the proposed mitigation approach to the Corps to assist with ensuring mitigation requirements are fulfilled and full compensatory mitigation is achieved for all unavoidable wetland impacts.

Finally, the applicant has stated that there would be no permanent fill to the 56.3 acres wetlands or waterbodies as a result of pipeline installation, and no compensatory mitigation was proposed. Pipeline construction would require a 100-foot-wide construction ROW, additional temporary workspaces, and several temporary access roads, all of which are pre-existing. The construction ROW would be temporarily cleared of vegetation for pipeline construction, temporary storage of trench spoil, and the operation of heavy equipment. In areas of saturated soils or standing water, temporary timber construction mats would be placed to support vehicles and construction equipment. Excavated trench spoil would be deposited in wetlands adjacent to the trench within the construction work area. Typically, the trench would be sufficiently deep to provide for a minimum of three feet of cover over the pipeline. In certain areas, such as road or buried utility crossings, deeper burial would be required. Once the pipeline is installed the trench would be backfilled and any excess subsoil would be removed from wetlands. A 25-foot-wide permanent maintenance ROW is proposed. The EPA is concerned that there may be a need to mitigate for temporal losses. The EPA recommends the applicant identify the duration and activities planned to restore to pre-project functions after the project has been completed. Typically, the threshold for activities to be considered temporary is less than 12 months or a single growing season.

In summary, the EPA recommends the Corps work with the applicant to enhance the information provided to assist the Corps in determining compliance with the Guidelines. Additionally, the EPA recommends the Corps work with the applicant to develop a revised comprehensive compensatory mitigation plan at a level of detail commensurate with the scale and scope of the impacts for all unavoidable impacts.

Thank you for the opportunity to review and comment on this PN, and if you have any questions on these comments, please contact Paul Kaspar of my staff, at kaspar.paul@epa.gov or 214-665-7459.

Sincerely,

A handwritten signature in dark ink, appearing to read "Maria L. Martinez". The signature is fluid and cursive, with the first name "Maria" being the most prominent.

Maria L. Martinez
Wetlands Section Chief

cc: U.S. Fish and Wildlife Service, Corpus Christi, TX
National Marine Fisheries Service, Galveston, TX
Texas Commission on Environmental Quality, Austin, TX
Texas Parks and Wildlife Department, Corpus Christi, TX